

# 70.0MHz SMD SAW FILTER

AFS70.0N01-SS8



RoHS  
Compliant



13.3 x 6.5 x 1.8mm

## FEATURES:

- Excellent pass band and group delay response
- Input/output 50ohm terminated
- High input power

## APPLICATIONS:

- IF SAW filter

## STANDARD SPECIFICATIONS:

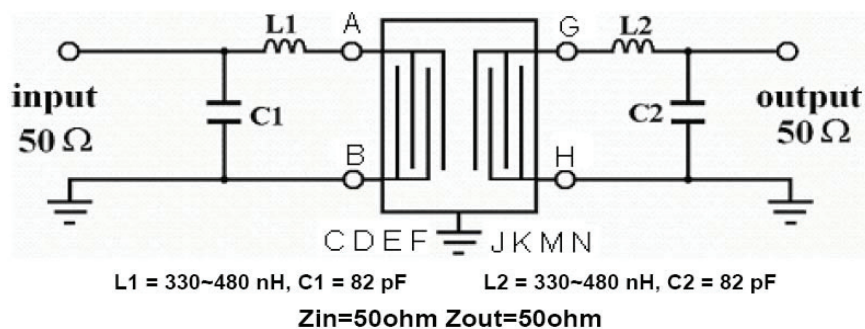
### MAXIMUM RATINGS

| Item                        | Value          |
|-----------------------------|----------------|
| Operation Temperature Range | -40°C to +80°C |
| Storage Temperature Range   | -40°C to +85°C |
| DC Permissible Voltage      | 10V DC max.    |
| Input Power Level           | 10 dBm         |

### ELECTRICAL CHARACTERISTICS

| Item                                                        | Value    |          |          |
|-------------------------------------------------------------|----------|----------|----------|
|                                                             | Min      | Typ      | Max      |
| Center Frequency (Fo)                                       | 69.9 MHz | 70 MHz   | 70.1 MHz |
| Insertion Loss (IL)                                         | --       | 9.8 dB   | 12 dB    |
| -1 dB Pass Bandwidth (BW1)                                  | --       | 1.0 MHz  | --       |
| -3 dB Pass Bandwidth (BW3)                                  | 1.26 MHz | 1.32 MHz | --       |
| -40 dB Pass Band width (BW40)                               | --       | 2.84 MHz | 2.9 MHz  |
| Amplitude Ripple Fc+/-0.35 MHz (AR)                         | --       | 0.3 dB   | 1.0 dB   |
| Group Delay Time Deviation in Pass Band Fc+/-0.35 MHz (GDV) | --       | 160 ns   | 280 ns   |
| Relative Attenuation                                        |          |          |          |
| DC ~ 65 MHz (UR)                                            | 45 dB    | 55 dB    | --       |
| 75 MHz ~ 200 MHz (UR)                                       | 45 dB    | 55 dB    | --       |
| Source and Load Impedance (RS/RL)                           | 50Ω      |          |          |

## MATCHING CIRCUIT:



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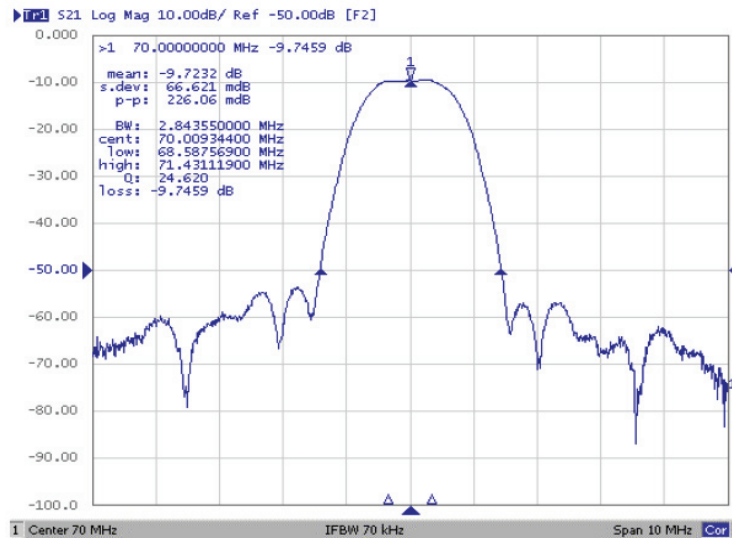
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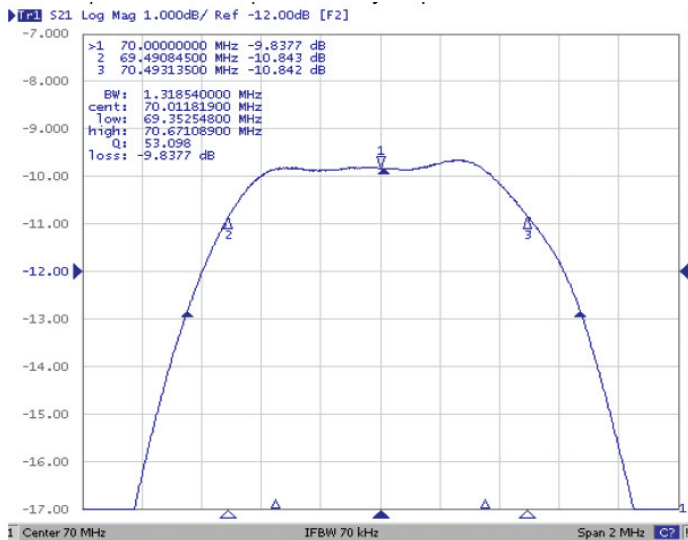
13.3 x 6.5 x 1.8mm

## FREQUENCY CHARACTERISTICS:

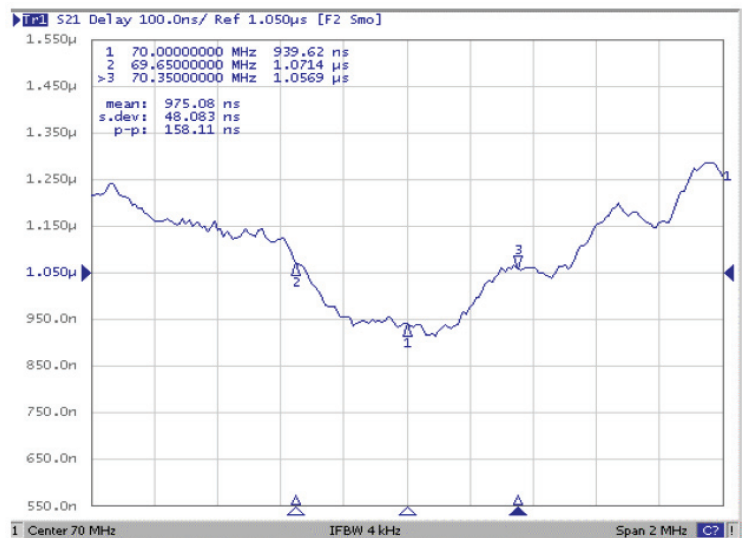
### Wide Band Response: (Span 10 MHz; Horizontal: 1 MHz/Div; Vertical: 10 dB/Div)



### Pass Band Response and Group Time Delay Response: (Horizontal: 0.2 MHz/Div; Vertical: 1 dB/Div)



### Group Time Delay Response: (Horizontal: 0.2 MHz/Div; Vertical: 100 ns/Div)



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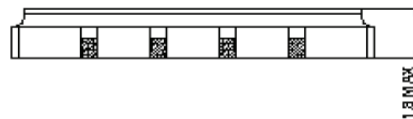
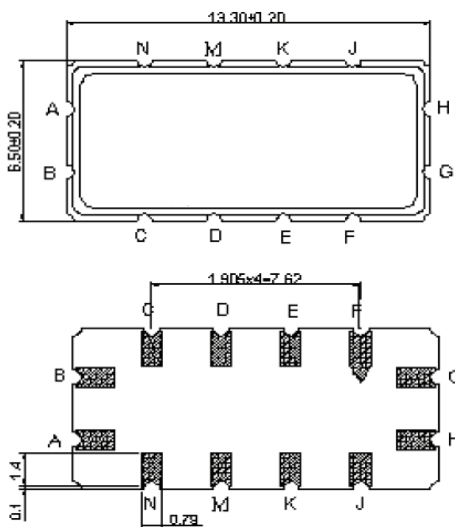


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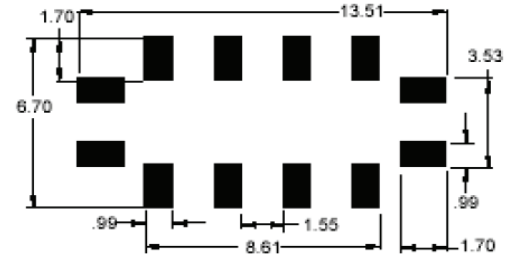


13.3 x 6.5 x 1.8mm

## OUTLINE DIMENSIONS:



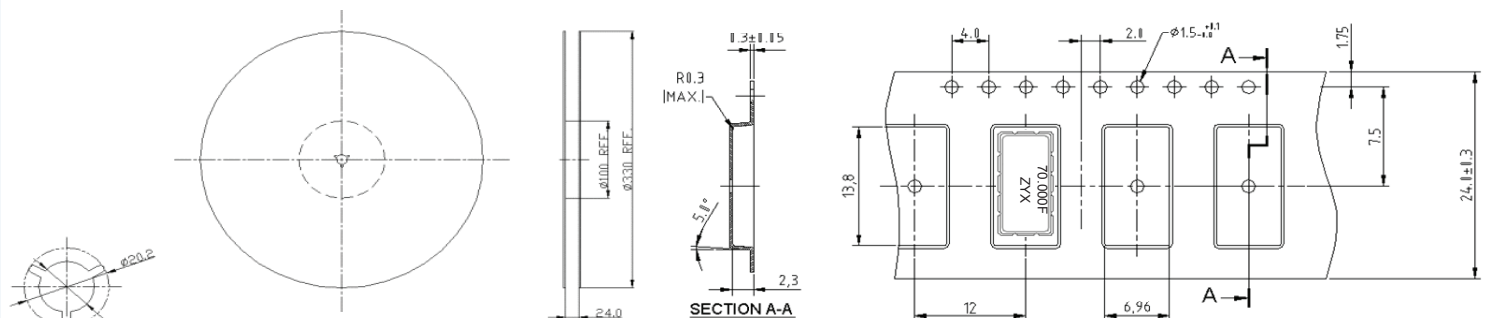
### Recommended Land Pattern



| Pin No.             | Function         |
|---------------------|------------------|
| Pin A               | RF Input         |
| Pin B               | RF Input Ground  |
| Pin G               | RF Output        |
| Pin H               | RF Output Ground |
| Pin C,D,E,F,J,K,M,N | Ground           |

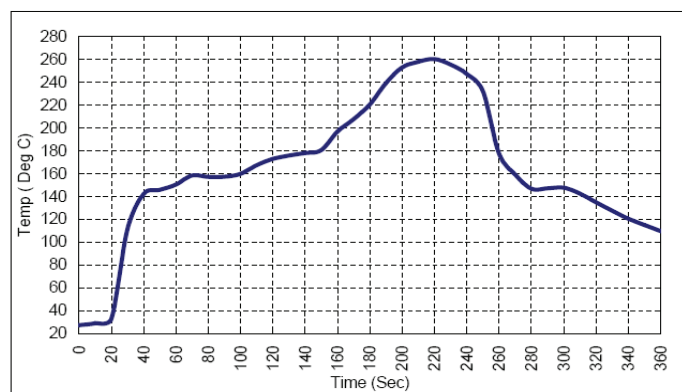
Dimension : mm

## TAPE & REEL:



Dimension : mm

## REFLOW PROFILE:



**NOTE:** Abracon manufactured products are intended for general commercial and industrial use. For applications requiring high reliability and/or presenting extreme operating environment, written consent & authorization from Abracon is required.

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